



Wireless HDMI Presentation System (WHPS)

Transform your wired projector into a wireless projector with audio.

Includes plug-and-show, 4-to-1 split screen, 1-to-4 screen projection, and PDA wireless projection features.



Customer Support Information

Order toll-free in the U.S.: Call 877-877-BBOX (outside U.S. call 724-746-5500)
FREE technical support 24 hours a day, 7 days a week: Call 724-746-5500 or fax 724-746-0746
Mailing address: Black Box Corporation, 1000 Park Drive, Lawrence, PA 15055-1018
Web site: www.blackbox.com • E-mail: info@blackbox.com

Trademarks Used in this Manual

Trademarks Used in this Manual

Black Box and the Double Diamond logo are registered trademarks of BB Technologies, Inc.

Mac and Macintosh are registered trademarks of Apple Computer, Inc.

Internet Explorer, PowerPoint, Windows, and Windows Vista are registered trademarks of Microsoft Corporation.

Any other trademarks mentioned in this manual are acknowledged to be the property of the trademark owners.

We're here to help! If you have any questions about your application or our products, contact Black Box Tech Support at **724-746-5500** or go to **blackbox.com** and click on "Talk to Black Box." You'll be live with one of our technical experts in less than 30 seconds.

Federal Communications Commission and Industry Canada Radio Frequency Interference Statements

This equipment generates, uses, and can radiate radio-frequency energy, and if not installed and used properly, that is, in strict accordance with the manufacturer's instructions, may cause interference to radio communication. It has been tested and found to comply with the limits for a Class A computing device in accordance with the specifications in Subpart B of Part 15 of FCC rules, which are designed to provide reasonable protection against such interference when the equipment is operated in a commercial environment. Operation of this equipment in a residential area is likely to cause interference, in which case the user at his own expense will be required to take whatever measures may be necessary to correct the interference.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This digital apparatus does not exceed the Class A limits for radio noise emission from digital apparatus set out in the Radio Interference Regulation of Industry Canada.

Le présent appareil numérique n'émet pas de bruits radioélectriques dépassant les limites applicables aux appareils numériques de la classe A prescrites dans le Règlement sur le brouillage radioélectrique publié par Industrie Canada.

Instrucciones de Seguridad (Normas Oficiales Mexicanas Electrical Safety Statement)

1. Todas las instrucciones de seguridad y operación deberán ser leídas antes de que el aparato eléctrico sea operado.
2. Las instrucciones de seguridad y operación deberán ser guardadas para referencia futura.
3. Todas las advertencias en el aparato eléctrico y en sus instrucciones de operación deben ser respetadas.
4. Todas las instrucciones de operación y uso deben ser seguidas.
5. El aparato eléctrico no deberá ser usado cerca del agua—por ejemplo, cerca de la tina de baño, lavabo, sótano mojado o cerca de una alberca, etc.
6. El aparato eléctrico debe ser usado únicamente con carritos o pedestales que sean recomendados por el fabricante.
7. El aparato eléctrico debe ser montado a la pared o al techo sólo como sea recomendado por el fabricante.
8. Servicio—El usuario no debe intentar dar servicio al equipo eléctrico más allá de lo descrito en las instrucciones de operación. Todo otro servicio deberá ser referido a personal de servicio calificado.
9. El aparato eléctrico debe ser situado de tal manera que su posición no interfiera su uso. La colocación del aparato eléctrico sobre una cama, sofá, alfombra o superficie similar puede bloquear la ventilación, no se debe colocar en libreros o gabinetes que impidan el flujo de aire por los orificios de ventilación.
10. El equipo eléctrico debe ser situado fuera del alcance de fuentes de calor como radiadores, registros de calor, estufas u otros aparatos (incluyendo amplificadores) que producen calor.
11. El aparato eléctrico deberá ser conectado a una fuente de poder sólo del tipo descrito en el instructivo de operación, o como se indique en el aparato.
12. Precaución debe ser tomada de tal manera que la tierra física y la polarización del equipo no sea eliminada.
13. Los cables de la fuente de poder deben ser guiados de tal manera que no sean pisados ni pellizcados por objetos colocados sobre o contra ellos, poniendo particular atención a los contactos y receptáculos donde salen del aparato.
14. El equipo eléctrico debe ser limpiado únicamente de acuerdo a las recomendaciones del fabricante.
15. En caso de existir, una antena externa deberá ser localizada lejos de las líneas de energía.
16. El cable de corriente deberá ser desconectado del cuando el equipo no sea usado por un largo periodo de tiempo.
17. Cuidado debe ser tomado de tal manera que objetos líquidos no sean derramados sobre la cubierta u orificios de ventilación.
18. Servicio por personal calificado deberá ser provisto cuando:
 - A: El cable de poder o el contacto ha sido dañado; u
 - B: Objetos han caído o líquido ha sido derramado dentro del aparato; o
 - C: El aparato ha sido expuesto a la lluvia; o
 - D: El aparato parece no operar normalmente o muestra un cambio en su desempeño; o
 - E: El aparato ha sido tirado o su cubierta ha sido dañada.

Table of Contents

Quick Start Guide	7
1. Specifications	11
2. Overview	12
2.1 Introduction.....	12
2.2 Features.....	12
2.3 What's Included	13
2.4 Hardware Description.....	13
3. Windows Client Utility	15
3.1 Starting the Program	15
3.2 Login	16
3.3 Main User Interface	16
3.4 Screen Projection.....	16
3.5 Audio Projection.....	18
3.6 Quick Connect	18
3.7 Menu Description.....	18
3.7.1 Show Receiver Information.....	19
3.7.2 Web Admin	19
3.7.3 Search Receiver Device	20
3.7.4 Select Projection Desktop (Win XP/Vista/7)	20
3.7.5 Projection Quality	20
3.7.6 Projection Mode.....	20
3.7.7 Projection Aspect Ratio	20
3.7.8 Advanced Screen Capture	20
3.7.9 Send Audio to Display	21
3.7.10 Auto Power Manager	21
3.7.11 Auto Wi-Fi Connect	21
3.7.12 Make Plug-and-Show Token.....	22
3.7.13 Copy Application to Desktop.....	23
3.7.14 About.....	23
3.7.15 Exit	23
4. Mac Client Utility	24
4.1 Launch Application.....	24
4.2 Main User Interface	24
4.3 Screen Projection.....	25
4.4 Mac Audio Projection.....	26
5. Web Management.....	27
5.1 Home Page.....	27
5.2 Download Software	27
5.3 Conference Control	28
5.4 Login Web Admin	30
5.4.1 System Status.....	30
5.4.2 Device Setup	31
5.4.3 Network Setup.....	32
5.4.4 OSD Setup	34
5.4.5 Change Passwords	35
5.4.6 Reset to Default.....	36

Table of Contents

5.4.7 Firmware Upgrade..... 36

5.4.8 Reboot System 38

5.4.9 Logout 38

Quick Start Guide

Step 1: Connect the projector VGA/HDMI cable to the Wireless HDMI Presentation System (WHPS) box VGA/HDMI connector and turn on the projector's power.

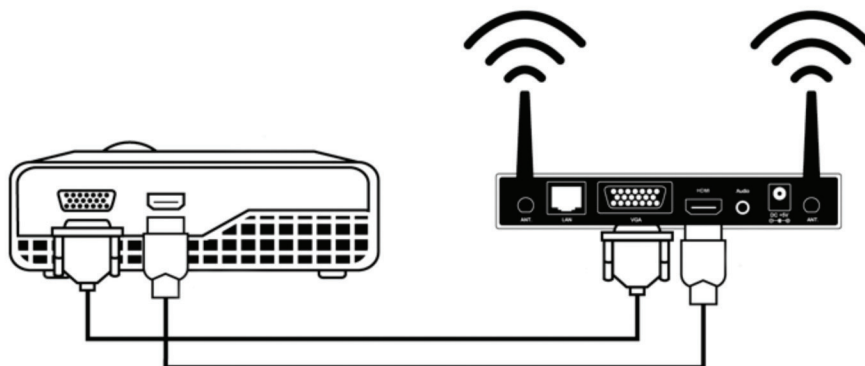


Figure QS-1.

Step 2: Turn on the WHPS box. When the projector shows the default menu on the screen as shown below. The WHPS box is ready.

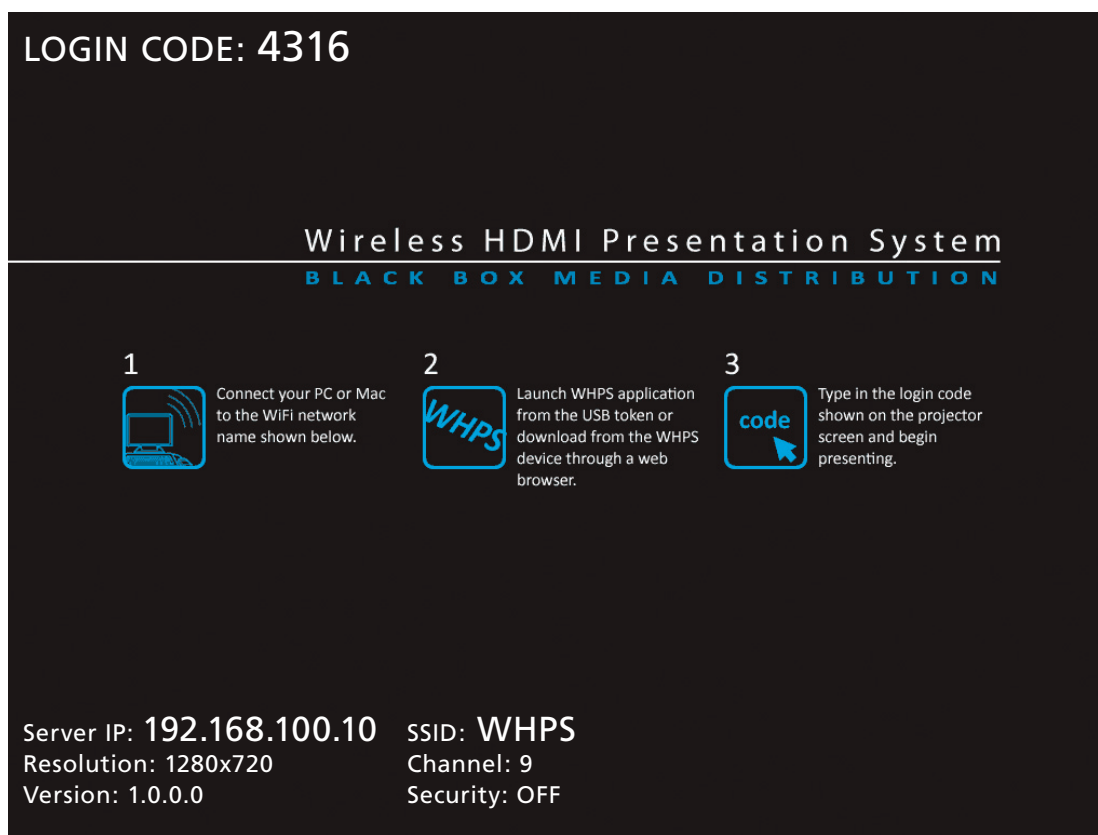


Figure QS-2. Default menu.

Quick Start Guide

Step 3: Make sure your PC WLAN is already enabled, and connect your PC to the WHPS box.

Step 4: Open your browser and enter the IP address to access the WHPS Web home page.

The default IP address of the WHPS is 192.168.100.10. It is the IP address shown on the left corner of the projector screen.

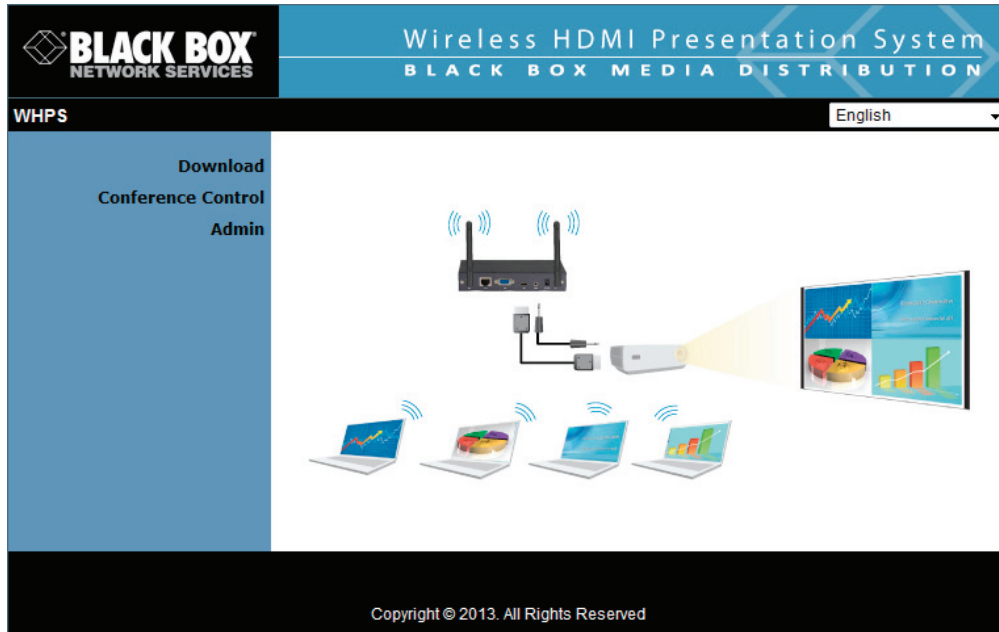


Figure QS-3. Main menu.

Step 5: Download the client software. Select either "Win8/7/Windows Vista/XP" or "MacBook 10.5–10.8" and execute the installation program. After installing the program, you will see the WHPS shortcut on the PC screen.

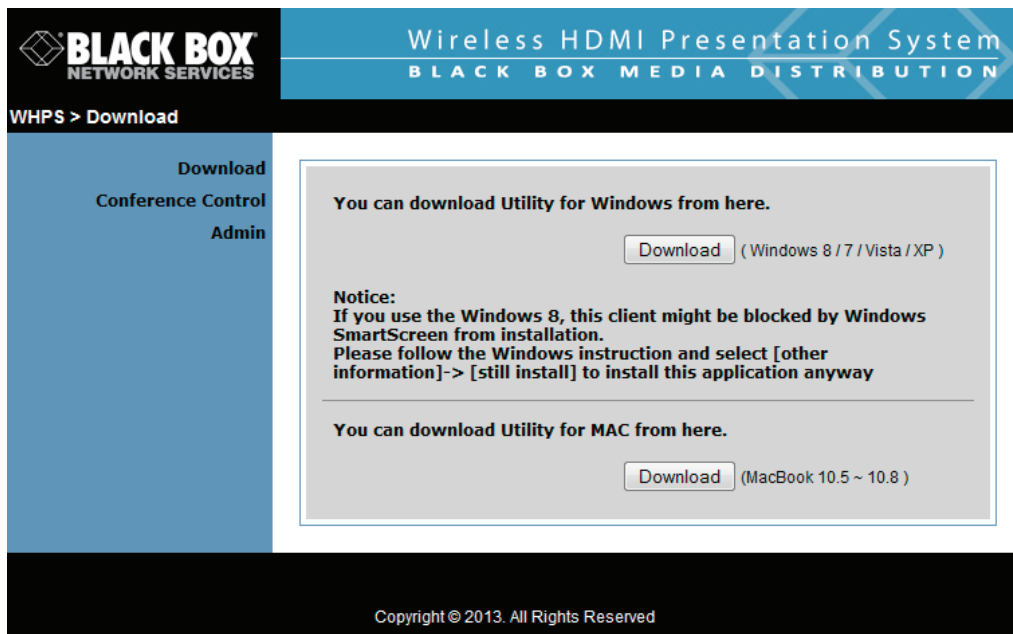
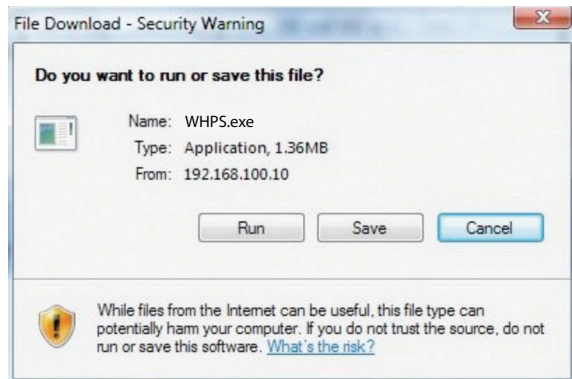


Figure QS-4. Download screen.



WHPS-Interactive

Figure QS-5. WHPS shortcut.

Step 6: Make sure your personal firewall allows WHPS software to pass through.

Step 7: Select the device that you want to project.

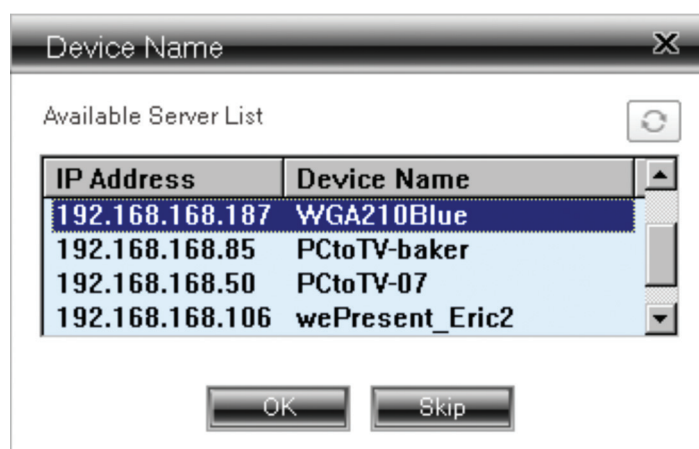


Figure QS-6. Available server list.

Step 8: Enter the LOGIN CODE and it will appear on the projector screen.



Figure QS-7. Enter Login code.

Step 9: Click the "Play" button to start projection.



Figure QS-8. Start projection.

1. Specifications

Technical Specifications

Antenna	2 Dipole
Approvals	CE: Yes; RoHS: Pending
Certificate	FCC, CE, NCC
Data Rate	Wireless: Up to 300 Mbps; LAN: 10 to 100 Mbps
Environmental Conditions	Operating temperature: 32 to 104° F (0 to 40° C); Storage temperature: 14 to 140° F (-10 to +60°C); Operating humidity: ≤ 90%; Storage humidity: ≤ 80%
Management	Web-based configuration, SNMP
Operating Systems	Windows XP/Vista/7/8; Mac OS 10.5 and above
Protocol	TCP/IP
Receive Sensitivity	802.11b: 11M–76 dBm; 802.11g: 54M–67 dBm; 802.11n: 65M HT2064 dBm, 150M HT40–61 dBm
Resolutions	Output: VGA: SVGA (800 x 600), XGA (1024 x 768), WXGA (1280 x 800), WXGA+ (1440 x 900); HDMI: 720 p (1280 x 720); PC/Laptop: SVGA (800 x 600), XGA (1024 x 768), SXGA (1280 x 1024); WXGA (1280 x 768) WSXGA (1440 x 900, 1600 x 1024); UXGA (1600 x 1200); WUXGA (1920 x 1200); QXGA (2048 x 1536)
Standards	IEEE 802.11b/g/n (2.4 GHz), 802.3/3u (10BASE-T/100BASE-TX)
Transmission Power	2 dBi
Wireless Security	IEEE standard 64, 128-bit WEP, WPA, WPA2-PSK
Wireless Frequency	2.4 GHz
Wireless Range (Maximum)	300 ft. (91.4 m) under optimum conditions
Connectors	Network: (1) RJ-45 (10BASE-T/100BASE-TX); Video: (1) HDMI F, (1) VGA F; Audio: (1) 3.5-mm jack (stereo); Antennas: (2) detachable 2-dBi external dipole on (2) SMA
Power	External adapter: 5 VDC; Input: 2.5 amps; Output: 5 VDC, 2.5 amps
Dimensions	1.2"H x 6.3"W x 2.4"D (3 x 16 x 6 cm)
Weight	0.7 lb. (0.3 kg)

2. Overview

2.1 Introduction

The Wireless HDMI Presentation System (WHPS) is a must-have device for your meeting room. It turns your existing “wired” projector into a “high-end wireless” projector. Plug-and-Show wireless projection features enable WHPS to make your presentation and meeting efficient and successful.

High-performance wireless projection and audio projection enables you to easily share multimedia on a big monitor without the hassle of using cables. The plug-and-show USB token makes wireless presentation easy. Just link your PC/Laptop to WHPS (through WLAN or Ethernet), plug the token into a USB port, and in seconds, your screen will be wirelessly projected to the connected projector.

With the WHPS unit’s 4-to-1 split screen feature, up to four PCs can be projected to one projector screen at the same time. Side-by-side comparison from four PCs/PDAs is easy.

Macintosh® (Mac®) wireless projection is possible because WHPS supports a Mac client connected and projected wirelessly. Simply launch the Mac client software that is stored in the accompanying USB token.

The WHPS supports Smartphone wireless projection. WHPS supports MobiShow function for the iOS/Android/Blackberry/Windows Mobile 5/6 system. Launch the MobiShow utility to play photos and PtG files stored in your mobile phone for presentation.

The WHPS also supports the WiFi-Doc function for iOS/Android. You can download the WiFi-Doc app from Google/Play or App store, and present the .doc .ppt .pdf .jpg file that’s stored in your device.

Enabling Simple Network Management Protocol Version 2c (SNMP) Manager helps you manage either single or multiple devices, so you don’t need to login to each device’s Web page to change device settings.

You can use JPG files to change the splash screen. Design the image with the message you want to present, upload it through a web control page, and you have a customized starting page.

An AP-Client Mode function lets WHPS join the existing Access Point through Wi-Fi. You get flexible wireless network deployment in an enterprise environment.

2.2 Features

- Supports Windows® 8, Win7, Vista®, XP, and Macintosh® (Mac®) version 10.5 and above operating systems.
- Plug and show! No installation required—just plug in the accompanying token to a USB port and start your presentation in seconds.
- 4-to-1 split screen projection enables you to turn one projector into four.
- Features conference control. Allows moderators to streamline meetings.
- Session security login, wireless WEP/WPA key, and Gatekeeper functions protect presentation contents and maintain security in your office networks.
- Supports high-performance screen projection with audio.
- Easily change the splash screen image.
- Manage devices easily using SNMP manager.
- Supports AP Client mode, so you can deploy wireless networks in enterprise environments.
- Present Office files from your device using WiFi-Doc.

2.3 What's Included

Your package should include the following items. If anything is missing or damaged, contact Black Box Technical Support at 724-746-5500 or info@blackbox.com.

- Wireless HDMI Presentation System unit (AVX-HDMI-WI device)
- USB token
- (1) power adapter (5-VDC, 2.6-A)
- (2) antennas
- This user manual
- Wallmount kit

Additional items you will need include:

- Projector
- VGA/HDMI cable

2.4 Hardware Description

Figures 2-1 and 2-2 show the front and back panels of the WHPS. Table 2-1 describes its components.

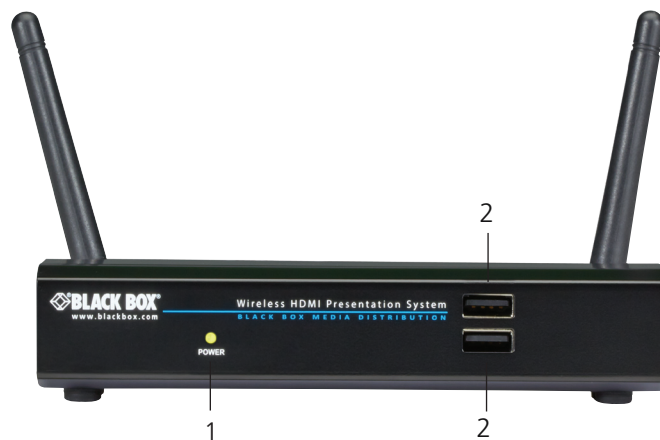


Figure 2-1. Front panel.



Figure 2-2. Back panel.

Table 2-1. WHPS components.

Number	Component	Description
1	Power LED	Lights when power to the unit is on.
2	(2) USB connectors	Connects clicker for presentations.
3	(2) Antennas	Connects to antennas.
4	RJ-45 port	Links to LAN.
5	VGA connector	Connects to projector input.
6	HDMI connector	Connects to projector input.
7	Audio connector	Attaches to audio.
8	5-VDC power connector	Links to power.

3. Windows Client Utility

3.1 Starting the Program

After you download the WHPS Windows program via the Web page successfully, follow the steps below.

Step 1: Click on the WHPS icon to execute the program. The program starts to search for the WHPS box automatically.



Figure 3-1. WHPS icon.

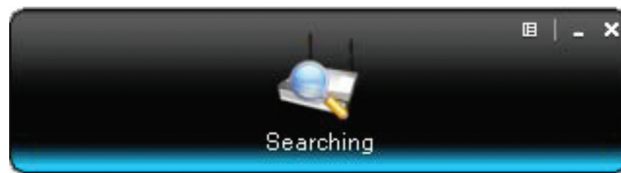


Figure 3-2. Searching for a WHPS box.

Step 2: If a WHPS box is found, the “Login Code” dialog box will pop up on the PC screen.



Figure 3-3. Login code dialog box pops up on the PC.

3.2 Login

Enter the login code to start the presentation. You will see the login code on the projector screen.

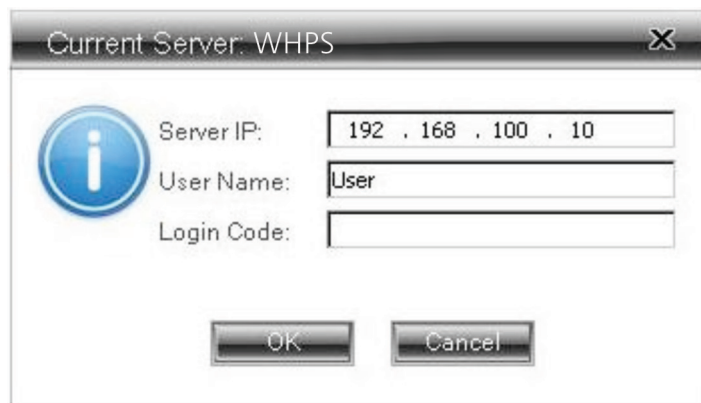


Figure 3-4. Login screen.

3.3 Main User Interface

The main user interface is shown in the next diagram.



Figure 3-5. Main user interface.








3.4 Screen Projection

Click the "Play" button for full or split screen, and you can project the main screen onto the display immediately. Click the "Pause" button to freeze your projection screen, then click the "Stop" button to stop projecting your screen.



Figure 3-6. Buttons used for screen projection.

Table 3-1. Buttons and descriptions.

Button	Description
	Full screen projection
	Project to Split #1
	Project to Split #2
	Project to Split #3
	Project to Split #4
	Stop projecting
	Pause projecting

3.5 Audio Projection

Step 1: If you are using WIndows® XP, before starting audio projection, install the “VAC.exe” (Virtual Audio Control) on your computer. You can find the software in the USB Token. (Windows Vista® and Win7 don’t need to install VAC.)

Step 2: Select the “Normal” option for “Projection Quality.”

You should then hear the audio from the device when projecting.

3.6 Quick Connect

The WHPS client can save the information from its last connection, including IP address and AP SSID. The next time you execute the WHPS utility, this information is displayed so you can connect to the WHPS quickly. Or, click “Rescan” to search for all available devices to connect.

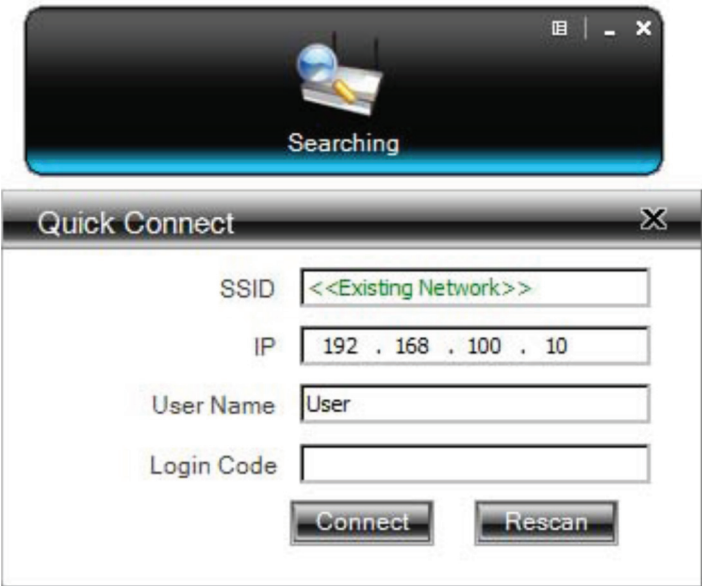


Figure 3-7. Search for available devices.

3.7 Menu Description

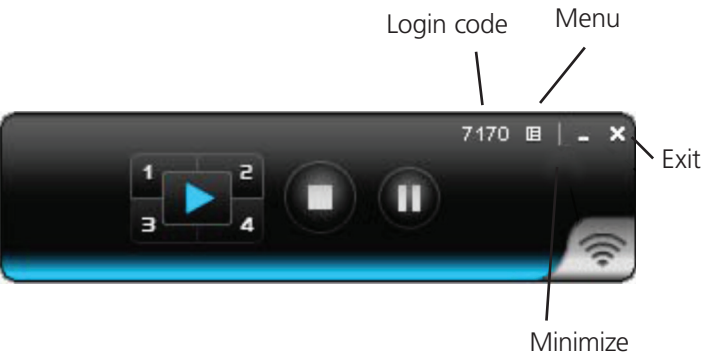
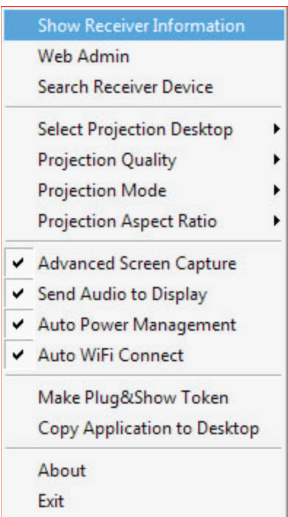


Figure 3-8. Drop-down menu.

3.7.1 Show Receiver Information

Click “Show Receiver Information” in the drop-down menu. The Receiver Information, such as Wi-Fi name, IP address, and code will appear on the display. This window will close automatically after 30 seconds.

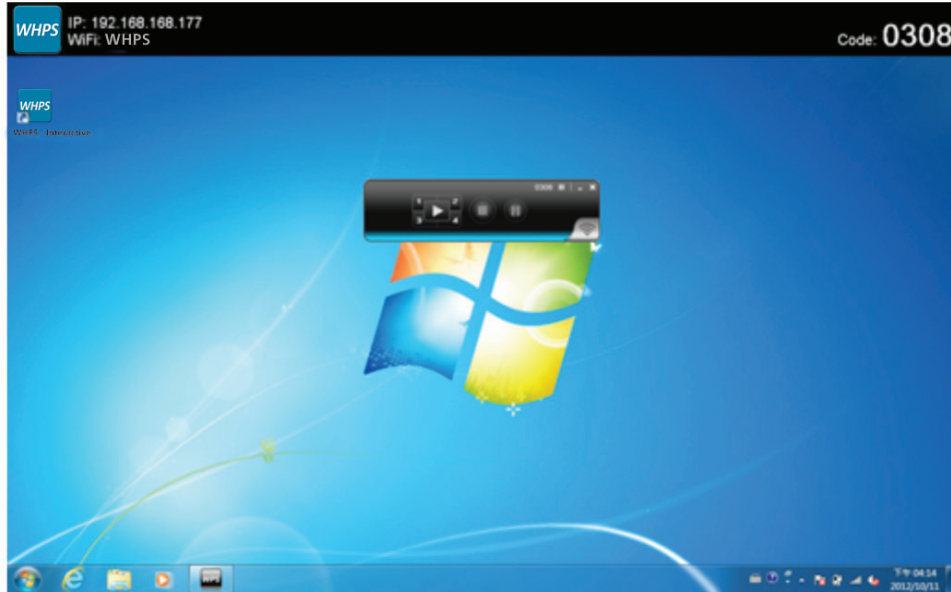


Figure 3-9. Show Receiver Information screen.

3.7.2 Web Admin

Click “Web Admin” in the drop-down menu, and the browser will open and connect to the receiver Web admin page automatically. (You can find the details of the Web admin page in Chapter 5.)

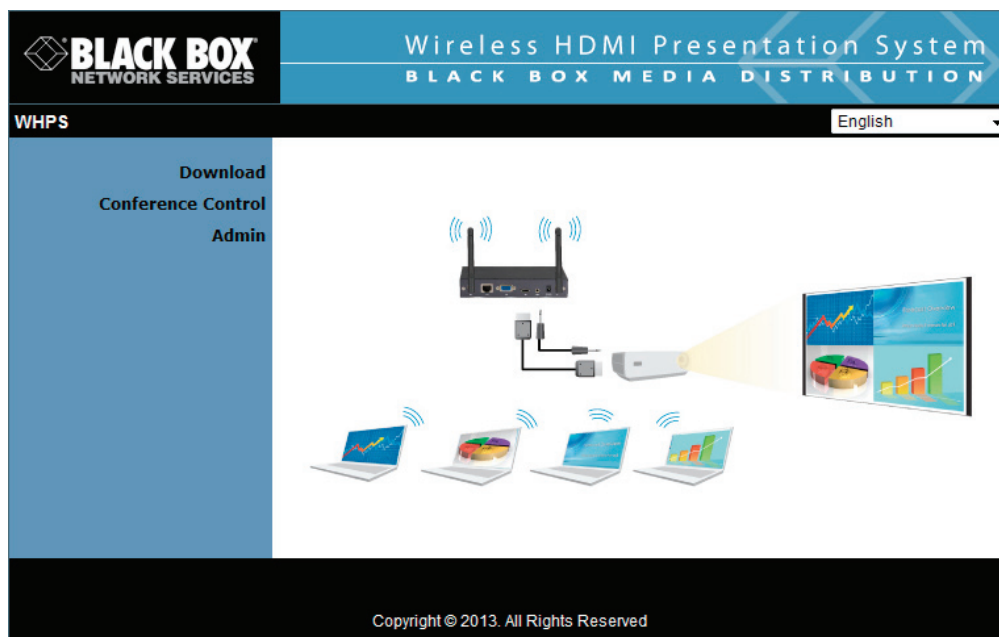


Figure 3-10. Web Admin screen.

3.7.3 Search Receiver Device

Click "Search Receiver Device" from the drop-down menu. The program will disconnect from the current receiver and search for the receiver again.

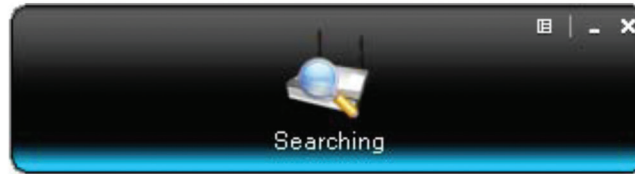


Figure 3-11. Search Receiver Device screen.

3.7.4 Select Projection Desktop (Win XP/Vista/7)

Click on "Select Projection Source" to project the main screen of the desktop or the virtual extended screen.

*NOTE: If you are using Windows XP system, you need to install the "VDD.exe" driver first. You can find it in the USB token.
If you are using Windows 7/Vista Starter edition, extended screen is not supported.*

3.7.5 Projection Quality

Click on "Projection Quality," choose "Normal" for faster projection speed with lower screen image quality, or "Best" for clear screen image quality but slower projection speed.

3.7.6 Projection Mode

1. The Projection Mode supports "Presentation Mode" and "Video Mode."
2. In "Video mode," the device will trigger the longer latency, but much smoother performance when you are watching video. At the same time, it will change the PC resolution to 1024x768 and gray out some options, then change back to Presentation mode when it detects that you are moving the mouse cursor.
3. For the "Presentation Mode," the device will always keep the shortest latency to provide the most responsive operation performance.

3.7.7 Projection Aspect Ratio

You can choose from two screen ratio settings, including "Keep Aspect Ratio" and "Fit Full Screen."

3.7.8 Advanced Screen Capture

Click the "Advanced Screen Capture," and you will be able to see tip windows and other layered windows (including the main UI) on the connected display. However, the mouse cursor may blink from time to time when you are projecting your PC screen.



Figure 3-12. Enable "Advanced Screen Capture" example: rollover text.

3.7.9 Send Audio to Display

Click “Send Audio to Display” to start the audio projection feature. It will mute your local speaker during the projection and restore it when it closes the application.

NOTE: If you are using Windows XP, you must install the Audio driver (VAC.exe). You can find the driver in the USB token.

3.7.10 Auto Power Manager

To make the highest projection performance, the application will turn the PC’s windows power scheme from current settings to “highest performance”; however, you can click the “Auto Power Manage” to enable or disable this function and restore your power scheme immediately.

3.7.11 Auto WiFi Connect

Click “Auto WiFi Connect” to enable the WiFi connect feature through the WHPS application.

3.7.12 Make Plug-and-Show Token

Click “Make Plug-and-Show Token” to make a USB WHPS Token. Simply insert a USB thumb drive and follow the wizard to make the token.

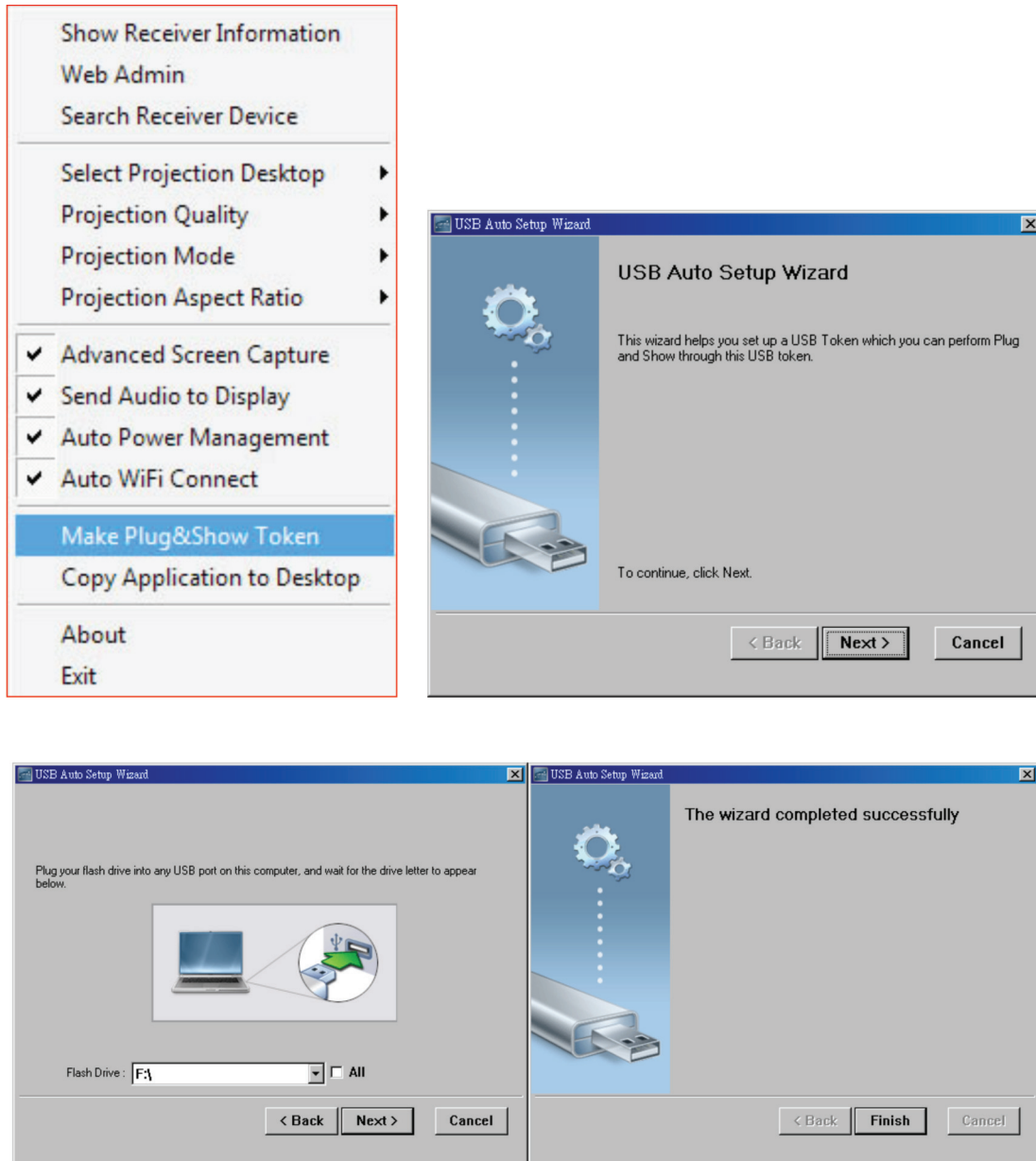


Figure 3-13. Drop-down menu, Make Plug-and-Show Token selected.

3.7.13 Copy Application to Desktop

Click the “Copy Application to Desktop” option from the drop-down menu; it will copy the application to your desktop immediately even if you don’t have system privileges.

3.7.14 About

Click “About” to show system information, including product model name, client version, IP address, and other information.

3.7.15 Exit

Click “Exit” to exit this application. It will stop current playing status and close the application immediately.

4. Mac Client Utility

4.1 Launch Application

Step 1: Enable your Wi-Fi and connect to the WHPS device.

Step 2: Execute WHPS client software for Mac.

Step 3: Launch WHPS software and enter the login code.

Step 4: Start projection.

4.2 Main User Interface

Figure 4-4 shows the main user interface.

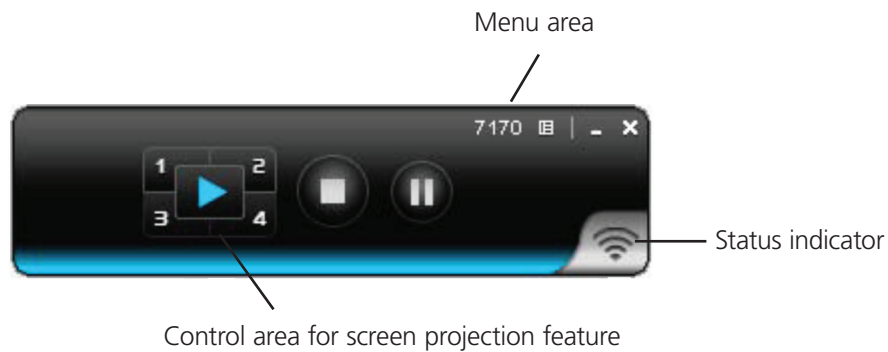


Figure 4-1. Main user interface.








4.3 Screen Projection

Click the “Play” button for full or split screen to immediately project the main screen onto the display. Click the “Pause” button to freeze your projection screen. Click the “Stop” button to stop projecting your screen.



Figure 4-2. Play button.

Table 4-1. Buttons and descriptions.

Button	Description
	Full screen projection
	Project to Split #1
	Project to Split #2
	Project to Split #3
	Project to Split #4
	Stop projecting
	Pause projecting

4.4 Mac Audio Projection

Before starting audio projection, install the “Soundflower.mpkg” (Mac system extension for audio) on your computer. You can find the software in the USB token.

Second, click the menu to open the function list and enable Audio Projection. You can hear the audio from the device when projecting.

5. Web Management

5.1 Home Page

1. Make sure your PC is connected to the WHPS box successfully.
2. Open your browser, it will enter the WHPS home page automatically.
3. If not, enter your IP address in the browser, and you will see the IP on the projector screen.
4. The default IP is 192.168.100.10.

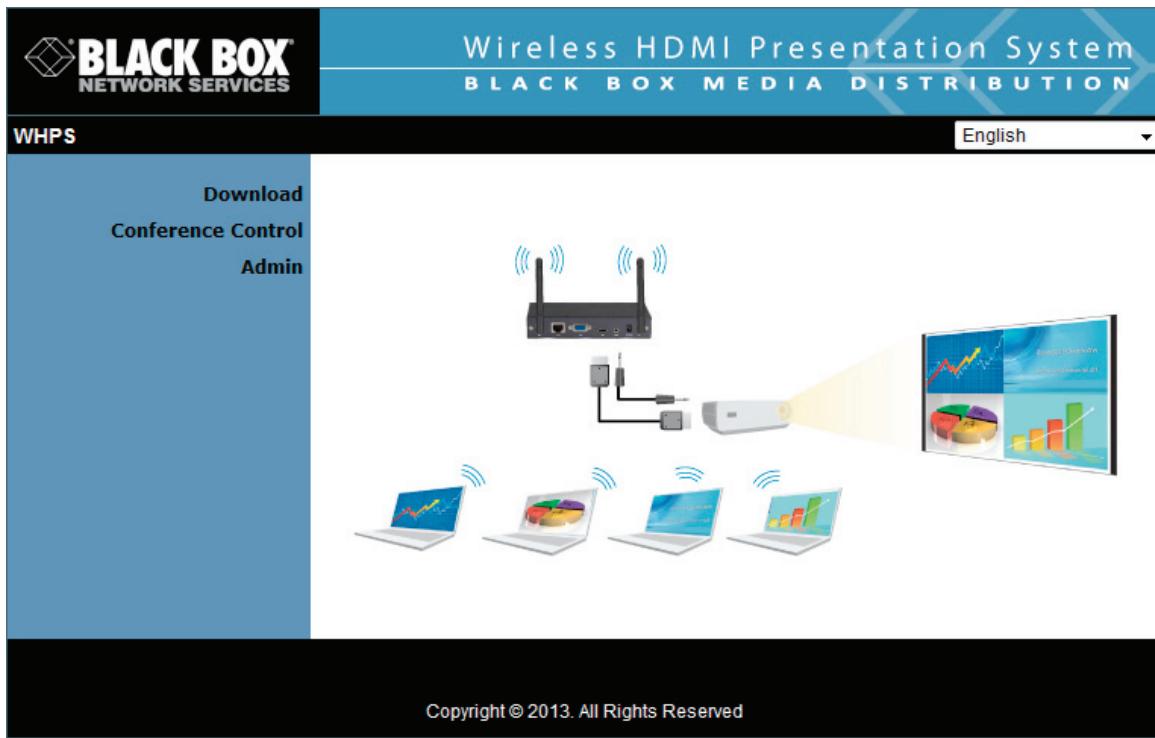


Figure 5-1. Home page.

5.2 Download Software

1. Select "Download software" from the WHPS screen.
2. Select the "Windows 8/Windows 7/Windows Vista/XP " or "Mac Utility" and execute the installation program.
3. Follow the Installation Wizard instructions until the installation process is complete.
4. If "Windows Security Alert" pops up, the Windows firewall is blocking this program. Press the "Unblock" button to continue installation.
5. Once installation is complete, a utility shortcut will display on the screen.

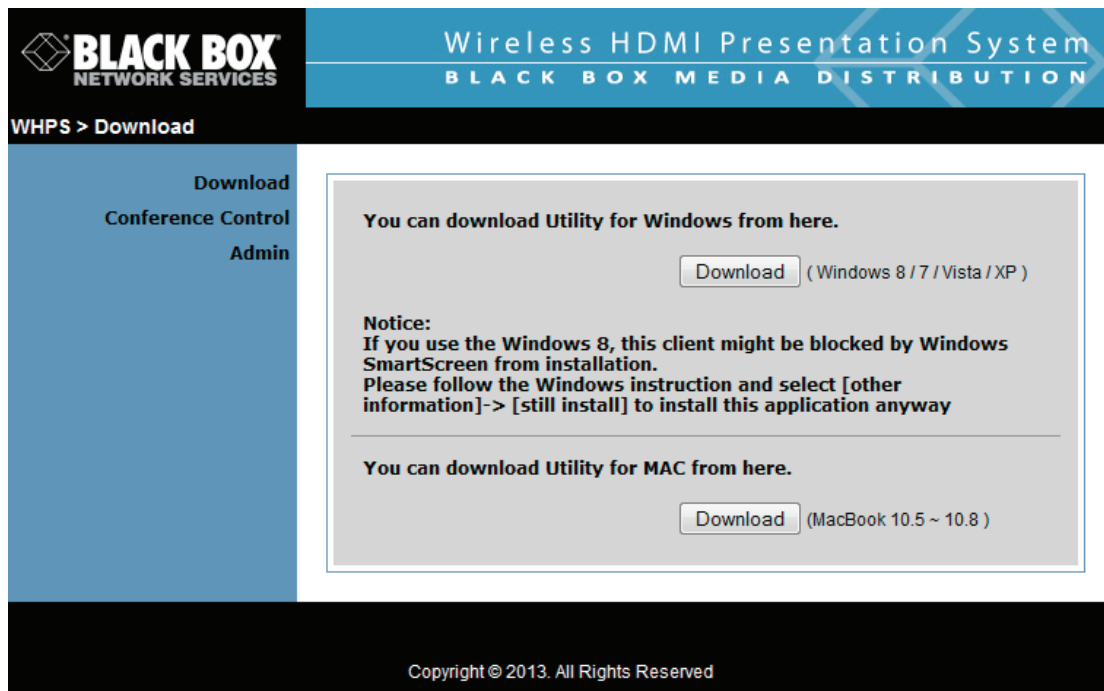


Figure 5-2. Download Windows or Mac utility.

5.3 Conference Control

1. This function allows you to host a meeting smoothly without projector cable swapping. Each participant can show their presentation.
2. Select the "Conference Control" function.
3. Enter the password (the default value is "moderator") and then press "Login."

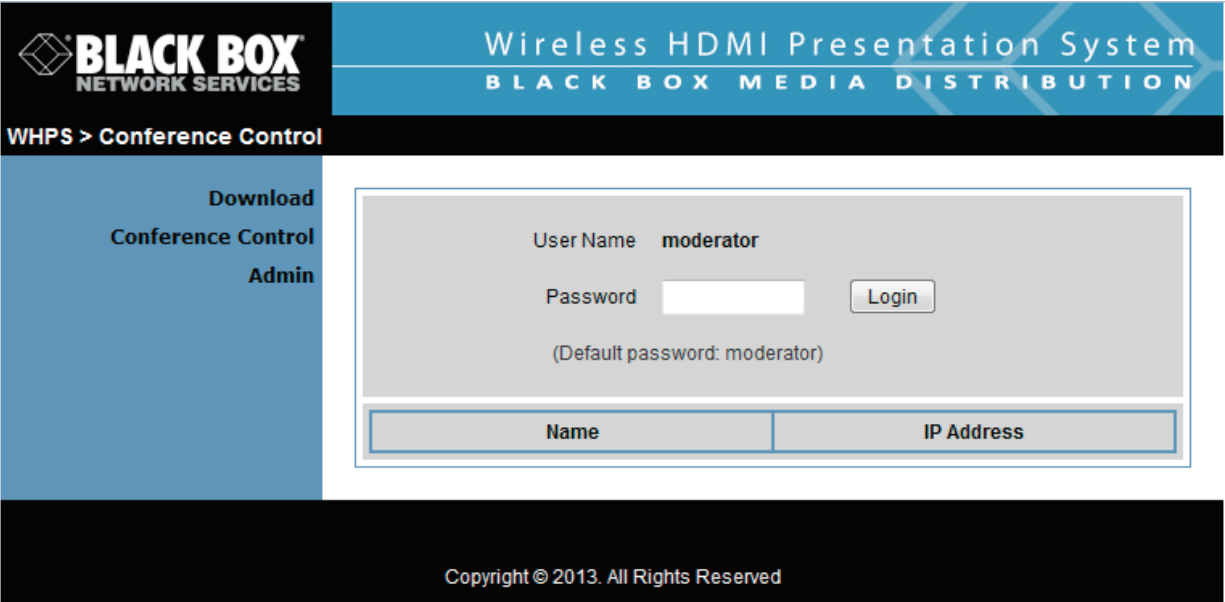


Figure 5-3. Enter password screen.

- 4. After login, you can see a User List on the screen that indicates all of the users connected to the WHPS box.
- 5. There are three columns: "Computer Name," "Play Control," and "IP Address."
- 6. Play Control: There are six buttons, including Play (Full), Play Split #1, Play Split #2, Play Split #3, Play Split #4, and Stop.
- 7. User List.

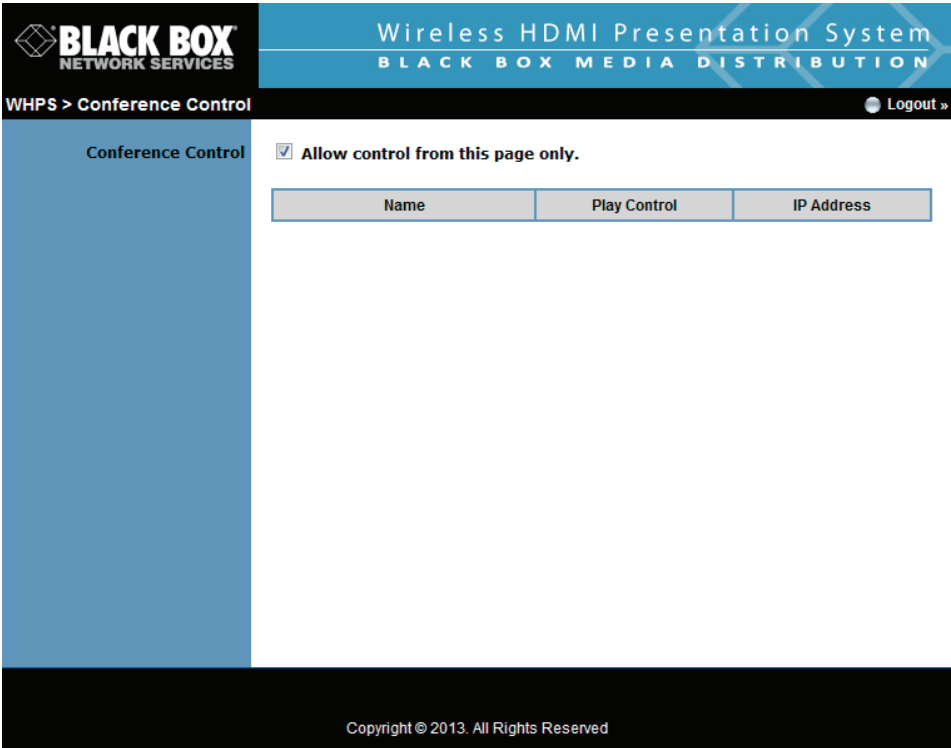


Figure 5-4. Play control page.

5.4 Login Web Admin

- 1. Click “Admin” and then enter the password to login to the Web page.
- 2. The password default value is “admin.”

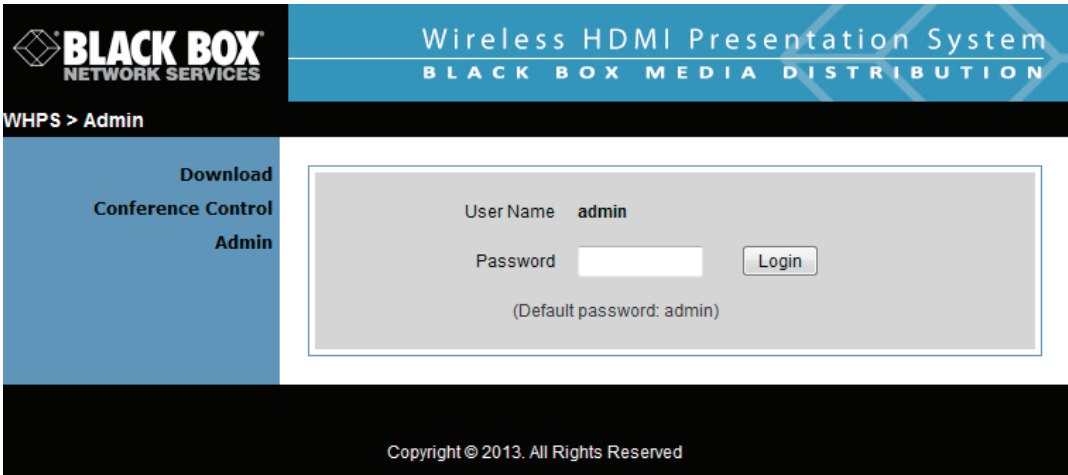


Figure 5-5. Enter password screen.

5.4.1 System Status

Click “System Status,” and the screen shows the current system status.

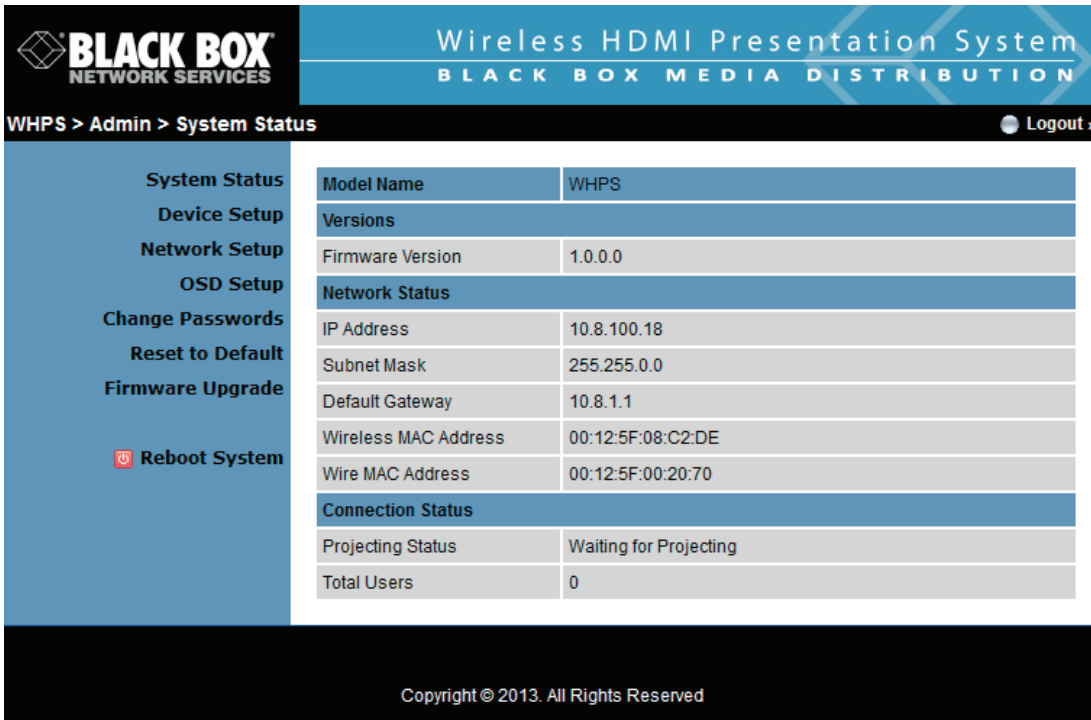


Figure 5-6. Current system status screen.

Table 5-1. Current system status screen components.

Option	Description
Model name	Product model name
Versions	
Firmware version	Product firmware version number
Network Status	
IP address	IP address of WHPS device
Subnet mask	Subnet mask
Default gateway	Default gateway
Wireless MAC address	Wireless MAC address
Wired MAC address	Wired MAC address
Connection Status	
Projecting status	Displays "Waiting for projecting" or "Projecting"
Total users	Shows how many users are logged into the WHPS

5.4.2 Device Setup

Click the "Projection Setup" button. The Device Setup screen appears.

BLACK BOX
NETWORK SERVICES

Wireless HDMI Presentation System
BLACK BOX MEDIA DISTRIBUTION

WHPS > Admin > Device Setup Logout »

System Status
Device Setup
Network Setup
OSD Setup
Change Passwords
Reset to Default
Firmware Upgrade
Reboot System

Device Setup

☐ VGA ☒ HDMI

Resolution: 720p (1280x720) ▼

Code: ☐ Disable ☒ Random ☐ Use the following code

Apply Cancel

Copyright © 2013. All Rights Reserved

Figure 5-7. Device Setup screen.

- Resolution: VGA: SVGA (800 x 600), XGA (1024 x 768), WXGA (1280 x 768), WXGA (1280 x 800) and WXGA+ (1440 x 900). The default value is XGA. HDMI: 720p (1280 x 720)
- Code: You can select "Disable," "Random," or "Use the following code" to set a specified 4-character number.
- Apply: Confirm and Save modifications
- Cancel: Cancel all the modifications.

5.4.3 Network Setup

There are many kinds of operating configurations.

BLACK BOX
NETWORK SERVICES

Wireless HDMI Presentation System
BLACK BOX MEDIA DISTRIBUTION

WHPS > Admin > Network Setup

Logout »

System Status

Device Setup

Network Setup

OSD Setup

Change Passwords

Reset to Default

Firmware Upgrade

Reboot System

IP Setup

DHCP Server Setup

Wireless Setup

Ap Client

GateKeeper

SNMP

☒ Obtain an IP address automatically ☐ Use the following IP address

IP Address

192 . 168 . 100 . 10

Subnet Mask

255 . 255 . 255 . 0

Default Gateway

192 . 168 . 100 . 10

DNS Server

192 . 168 . 100 . 10

☒ Auto ☐ Disable

Start IP

192 . 168 . 100 . 11

End IP

192 . 168 . 100 . 254

Subnet Mask

255 . 255 . 255 . 0

Default Gateway

192 . 168 . 100 . 10

DNS Server

192 . 168 . 100 . 10

Wireless LAN

☒ Enable ☐ Disable

Embedded AP SSID/ NAME

WHPS

Region

WORLDWIDE

SSID Broadcast

☒ Enable ☐ Disable

Channel

Auto

Encryption

Disable

Key

☒ Hide characters

Channel Bandwidth

☐ 20MHz ☒ Auto

Connect to Existing AP

☐ Enable ☒ Disable

Existing AP SSID

Scan

Encryption

Disable

Key

☒ Hide characters

GateKeeper

☒ All Pass ☐ All Block ☐ Internet Only

SNMP

☒ Enable ☐ Disable

Apply

Cancel

Copyright © 2013. All Rights Reserved

Figure 5-8. Network setup screen.

1. Click the “Network Setup” button, and the screen will show the network setting items.

NOTE: Auto-Configuration Network Setup on WHPS.

The default setting of the WHPS box is DHCP client. When the WHPS box is connected to a LAN that already has a DHCP server present, the WHPS box takes an IP address assigned to it by the server. When the WHPS box is connected to a LAN that does not have a DHCP server, the WHPS box becomes the DHCP server in the network.

IP Setup

- You can select “Obtain IP address automatically” or “Use the following IP address.”
- IP Address: The default value is 192.168.100.10.
- Subnet Mask: The default value is 255.255.255.0.
- Default Gateway: The default value is 192.168.100.10.
- DNS Server: The default value is 192.168.100.10.

DHCP Server Setup

- You can select “Auto (Enable/Disable DHCP Server” or “Disable.”)
- Start IP: The start IP address of DHCP Server.
- End IP: The end IP address of DHCP Server.
- Subnet Mask: The default value is 255.255.255.0.
- Default Gateway: The default value is 192.168.100.10.
- DNS Server: The default value is 192.168.100.10.

Wireless Setup

- Wireless LAN: The default value is “Enable.”
- Region: Default value is “Worldwide.”
- SSID: SSID string, max. Length is 32 bytes.
- SSID Broadcast: The default value is “Enable.”
- Channel: To set fixed channel or Auto. The “Auto” means that after WHPS powers on, it will scan all wireless channels and select one clear channel automatically.
- Encryption: You can select “Disable” or one of WEP/WPA/WPA2 64-bit or 128-bit in ASCII or HEX string.
- Key: If Encryption is enabled, you have to set the key value according to the encryption mode you selected.

SNMP

You can select the “Enable” or “Disable” option to set the SNMP function. The SNMP community password will sync with the Admin password.

Channel Bandwidth

- 20 Hz: You can select “20 Hz” to enable the link speed to reach 150 Mbps.
- Auto: You can select “auto” to enable the link speed to reach 300 Mbps.

NOTE: Your PC also needs to support the bandwidth.

AP Client

- Connect to Existing AP: Input the SSID of home Wi-Fi AP you want to connect.
- Encryption: You can select “Disable” or WEP/WPA/WPA2 64-bit or 128-bit in an ASCII or HEX string.
- Key: If Encryption is enabled, you have to set key value according to the encryption mode you selected.
- Press the “Apply” button, and follow the reboot instructions to make it work.

Gatekeeper

Gatekeeper is designed to ensure the enterprise network security within the WHPS box.

- “All Block” can block Guest Users (through wireless) from accessing all office networks (LANs).
- “All Allow” can pass Guest Users (through wireless) to access all office networks.
- “Internet Only” can block Guest Users (through wireless) from office networks (LANs) but still reserve internet connection capability.

Apply: Press the “Apply” button to select this mode.

Cancel: Press the “Cancel” button to abort action.

5.4.4 OSD Setup

Click on the “OSD Setup” button to change the OSD standby image or set splash screen information.

BLACK BOX NETWORK SERVICES

Wireless HDMI Presentation System
BLACK BOX MEDIA DISTRIBUTION

WHPS > Admin > OSD Setup Logout »

System Status
Device Setup
Network Setup
OSD Setup
Change Passwords
Reset to Default
Firmware Upgrade
Reboot System

Change Logo Image

Logo Image Default

Restore to default

File Name Browse... No file selected.

Image File Upload

maximum file size is 510K.
(Recommended image resolution: 1024*768)

Enable Disable Some Information

Apply Cancel

Screen Information

Copyright © 2013. All Rights Reserved

Figure 5-9. OSD setup screen.

Change Logo Image

- Logo Image: File name of OSD, default setting is “default.”
- Image File Upload: Upload the customized OSD standby image. (JPG file, maximum file size is 510K. Recommended image resolution: 1024 x 768.)

Screen Information

- Enable: Default value, Show server IP, Resolution, Firmware version, SSID, channel and security on the screen.
- Disable: User can only see quick guide on splash screen; server IP, SSID, login code, etc. won't be displayed.
- Some Information: Show server IP and SSID on the screen only.

5.4.5 Change Passwords

Click the "Change Password" button to change the password value. The length of the password is up to 8 characters.

The screenshot displays the Black Box WHPS Admin web interface. At the top, the header includes the Black Box Network Services logo and the text 'Wireless HDMI Presentation System' and 'BLACK BOX MEDIA DISTRIBUTION'. Below the header, a navigation bar shows 'WHPS > Admin > Change Passwords' and a 'Logout' button. The left sidebar contains a list of system management options: System Status, Device Setup, Network Setup, OSD Setup, Change Passwords (highlighted), Reset to Default, Firmware Upgrade, and Reboot System. The main content area is divided into two sections: 'Conference Control' and 'Admin'. Each section contains two input fields for 'Enter New Password' and 'Confirm New Password', followed by an 'Apply' button. The footer of the page states 'Copyright © 2013. All Rights Reserved'.

Figure 5-10. Change password screen.

- Enter New Password: Enter the new password for each category.
- Confirm New Password: Double confirm new password.
- Apply: Confirm and Save modifications.

5.4.6 Reset to Default

Click the “Reset to Default” button to restore factory default settings.

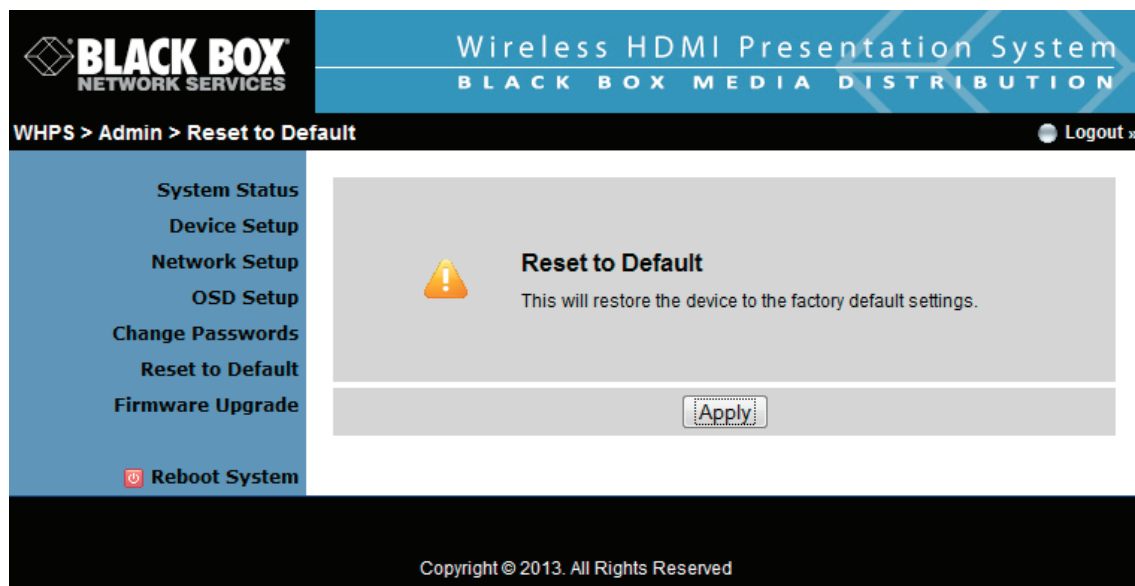


Figure 5-11. Reset to default screen.

- Apply: Confirmation and action.

5.4.7 Firmware Upgrade

Click the “System Configuration” button to save your configuration of this device; you can import this back when you finish the firmware upgrade.

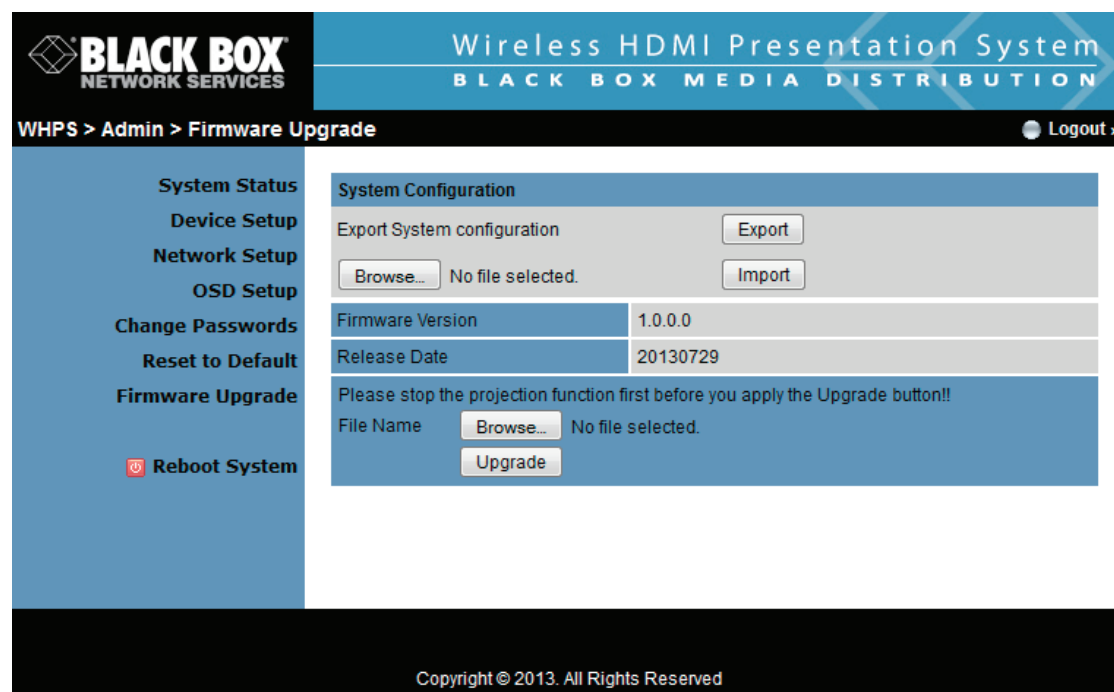


Figure 5-12. Firmware upgrade screen.

Click the “Firmware Upgrade” button to upgrade firmware.

1. Get the latest firmware image file from your vendor.
2. Click “Browse” to specify the file name you want to upgrade.
3. Click “Upgrade” to start.
4. A warning message and counter shows on the screen.
5. After a few minutes, a complete message will show on the screen.
6. Restart the WHPS box for the new firmware to take effect.

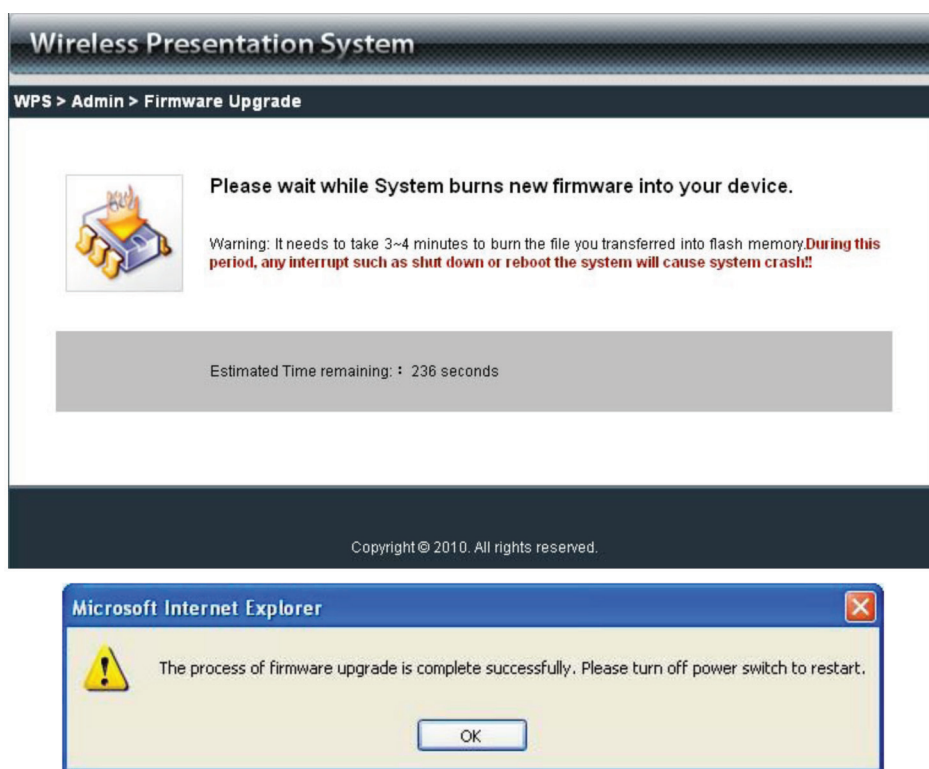


Figure 5-13. Confirm firmware upgrade screen.

WARNING: Don't power off the WHPS while firmware is upgrading; this will cause your box to malfunction.

5.4.8 Reboot System

Click the “Reboot System” button to restart the system.

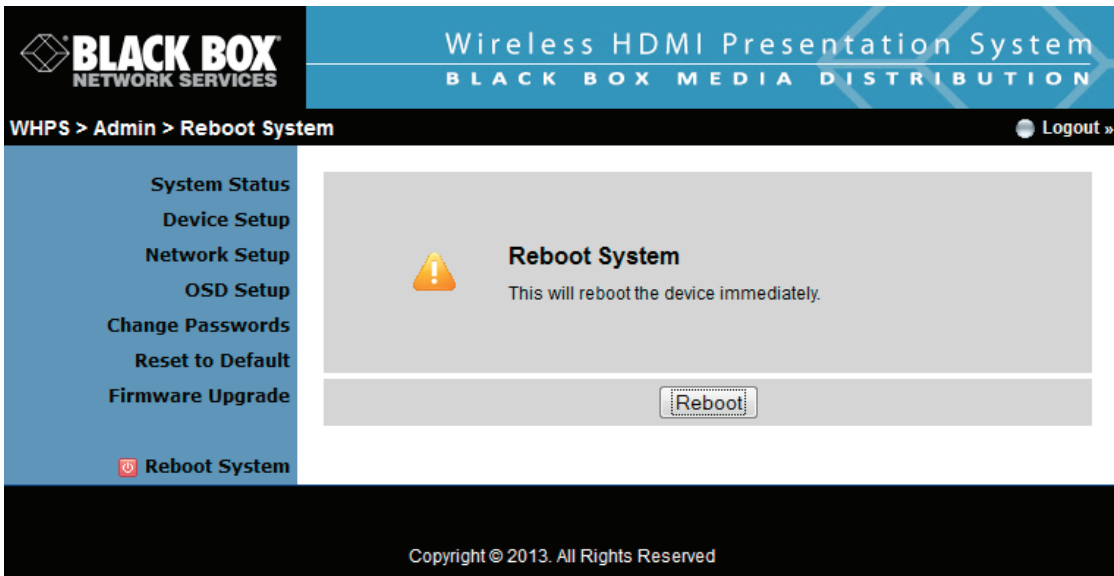


Figure 5-14. Reboot system screen.

- Reboot: reboot system automatically.

5.4.9 Logout

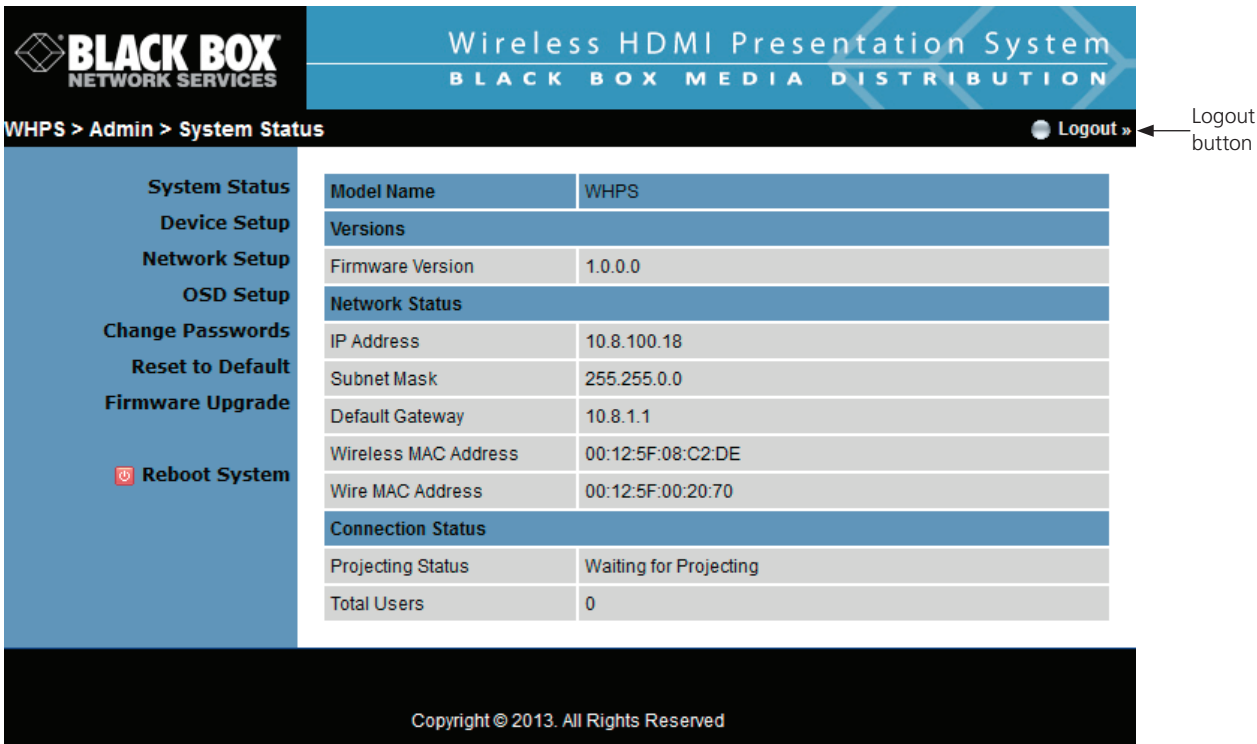


Figure 5-15. Logout button (see top right of this screen).

Black Box Tech Support: FREE! Live. 24/7.

Tech support the
way it should be.



Great tech support is just 30 seconds away at 724-746-5500 or blackbox.com.



About Black Box

Black Box provides an extensive range of networking and infrastructure products. You'll find everything from cabinets and racks and power and surge protection products to media converters and Ethernet switches all supported by free, live 24/7 Tech support available in 30 seconds or less.

© Copyright 2013. Black Box Corporation. All rights reserved.